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# 307FR LITE II™

## *LIGHTWEIGHT TROWELABLE SCULPTING EPOXY*

## *E-84 CLASS A FLAME-RATED & PUBLIC SPACE SAFE*

## PRODUCT DESCRIPTION:

**307FR LITE II™ is a lightweight 2-component trowelable epoxy system that is E-84 Class A Flame-Rated and public space safe-** It is formulated to an easy-to-mix "paste-like" consistency that is commonly used for general fabrication, coating, sculpting patching, filling, joining, and repair. It contains no VOC's and is solvent-free.
307FR LITE II cures to a hard, strong, durable material suitable for interior and exterior public spaces and themed environments.

## WORKING FEATURES & BENEFITS:

**307FR LITE II** is easy to mix and apply by hand or with a trowel or spatula.

### EASY TO MANIPULATE

- ***Can be Stamped, Textured, or Sculpted***
- ***Bonds to Itself and Many Other Substrates***
- ***Will Not Melt or Dissolve Foam Surfaces***
- ***Can be Smoothed With Water***
- ***Easy to Clean Up With Just Water***

## USE WITH POLYGEM 307 THICKENER

Polygem 307 Thickener allows you to customize your working consistency from a "thin paste" to a thicker "dough" or "clay" material to best fit your preferred working style and project needs.

**Polygem 307 Thickener** makes **307FR LITE II** easier to manipulate, sculpt, & stamp. It also minimizes sag when applying the material to vertical surfaces.

## SUBSTRATES:

**307FR LITE II** bonds to many materials including metals, wood, fiberglass, concrete, PVC, Plexiglas™ (acrylic), plastics, foams, including EPS, lathing and glass.

**NOTE: 307FR LITE II DOES NOT BOND** to silicone, polyethylene, polypropylene, or plastic wrap.

## PERFORMANCE BENEFITS OF CURED MATERIAL

- ***ASTM E-84 Class A Flame Rated***
- ***No VOC's***
- ***Chemically Inert***
- ***No Solvents***
- ***Halogen-Free***
- ***Contains No Heavy Metals***
- ***Cures to a Hard, Durable, Lightweight Material***
- ***Easy to Sand, Shape, and Machine***
- ***Paintable and Stainable***
- ***Weather Resistant to Heat & Moisture***
- ***Solvent Resistant***
- ***Not Suitable for Aquatic Environments***
  ***(For aquatic environments use 307 Lite)***

**307FR LITE II**

**SDS**

## UNIT SIZE & COVERAGE RATE @¼ in. (6.35 mm)

| | |
|---|---|
| **2 Gallons** 21.80 lb (9.89 kg) | **11 square ft.** (1.02 $m^2$) |
| **10 Gallons** 109.50 lb (49.67 kg) | **55 square ft.** (5.10 $m^2$) |
| **2 Drums** 1,206 lb (547.03 kg) | **550 square ft.** (60.3 $m^2$) |

## TECHNICAL SPECIFICATIONS @ 73 °F (23 °C)

TYPICAL PROPERTIES

**Mix Ratio: 1A:1B** by volume | **Mixed Viscosity:** Paste

**Working Time:** .
**Spreadable:** 60 Min. - **Stampable:** 2 Hrs. - **Sculptable:** 3 Hrs.

**Cure Time:** 16 Hours | **Shore Hardness:** 77D | **Shelf Life:** 36 Mos.*

**Color:** Light Brown/Tan
Color may vary.

**Heat Deflection Temp:** 115 °F (46 °C) ASTM D-648
**Compressive Strength:** 11,500 psi ASTM D-695
**Tensile Strength:** 2,100 psi ASTM D-638

Properties are based on the mixed material without Polygem 307 Thickener.
All values measured after 7 days st 73 °F (23 °C).

* From date of manufacture when stored at 73 °F (23 °C) in unopened containers.

# 307FR LITE II™

***LIGHTWEIGHT TROWELABLE SCULPTING EPOXY THAT IS E-84 CLASS A FLAME-RATED***

## PROJECT PREPARATION:

***BEST PRACTICE: CONDUCT A SMALL-SCALE TEST.***
*Before mixing substantial amounts of epoxy, always conduct a small-scale test to ensure the planned material & process yields desired results.*

1. **Storage –** Store and use product at room temperature 73 °F (23 °C) **DO NOT USE** below 60 °F (16 °C).

2. **Safety -** Use in a well-ventilated area ("room size" ventilation). If you use any epoxy system regularly, wearing a NIOSH-approved respirator is advised. Wear safety glasses, long sleeves, and rubber gloves to minimize skin contact. Wear nitrile or vinyl gloves only.

3. **Plan Your Project & Rate of Coverage –** Recommended minimum thickness is ¼ in (6.35 mm).

4. **Prepare Your Substrate/Surface –** If applying to smooth surfaces such as metals, plastics, glass, etc., surface may be roughened with sandpaper (120 grit) to aid adhesion. Clean surface thoroughly to ensure it is free of dust, oils, release agents, etc.

   **For Metal Substrates–** Abrade the surface to a white metal finish, then wipe down and clean it thoroughly. Apply a fiberglass sheet saturated in a laminating epoxy to the surface. When possible wrap the sheet around the substrate to ensure a good mechanical bond before applying **307FR LITE II**.

5. **Measure & Mix–** After pre-mixing Parts A and B, measure out equal parts 1A:1B by volume. Combine and mix material thoroughly until "streak free". Large volumes can be mixed on a flat surface using two trowels. **DO NOT** mix more than can be applied within the working time of 60 minutes. **Material is mass sensitive** see step 8.

6. **When using with Polygem 307 Thickener –** First, thoroughly coat gloves and working area with **Polygem 307 Thickener** to prevent sticking. Knead Parts A & B together while folding small amounts of powder into the mixture. The amount of powder to add depends on the desired working consistency. Continue to fold mixture repeatedly until it is streak-free.

7. **Application:** Trowel or spread by gloved hand onto your substrate. **DO NOT** apply to a surface that is less than 60 °F (16 °C).

8. **WORKING TIME - MATERIAL IS MASS SENSITIVE. More Mass = Less Time to Work.** Apply and spread quickly to achieve the maximum working time. Temperatures above 73 °F (23 °C) will reduce working time.

## SMOOTH | TEXTURE | STAMP | SCULPT

**SMOOTH:** Water may be used directly on the epoxy surface to smooth it.

**TEXTURE: (Smooth Glass-Like Surface)**
Apply clear plastic food wrap to the uncured epoxy and smooth it to eliminate all wrinkles. Leave the wrap in place until the epoxy cures. Once cured, the plastic wrap can be peeled away easily; leaving a high gloss finish.

**(Rough, Distressed or Patterned Surface)**
A gloved hand or tools may be used to roughen or distress the surface. Small amounts of water applied to the tools or surface before & during texturing will minimize material build up.

**STAMP:** When stamping, we recommend using a flexible rubber stamp. Using a spray bottle filled with water, lightly dampen your stamp, and press it firmly into the material. Once the impression has been made, peel the stamp away carefully. There should be minimal transfer of material onto the stamp.

**SCULPT:** Sculpt using a gloved hand and/or tools to shape material to your desired form. Water may be used to minimize material build up on gloves and/or tools.

## CURING AND HEAT RESISTANCE:

**Curing: 307FR LITE II** cures in approximately 16 hours at room temperature 73 °F (23 °C). Elevated temperatures will accelerate this cure time. Full physical properties will be achieved in approximately 7 days.

**Heat Resistance:** Material cured at room temp with a minimal thickness of ½ in. (1.27 cm) will resist temperatures up to 115 °F (46°C).

## FINISHING, PAINTING , AND CLEAN UP:

**Finishing –** Cured material may be finished either by hand or with power tools. For best results & to minimize build up of material , use power tools at lower speeds. (Wear a dust mask)

**Painting –** Cured **307FR LITE II** can be painted with any water or solvent based paint system available from your local distributor. Follow paint manufacturer's instructions.

**Sealing (Optional) –** After painting **307FR LITE II** may be sealed with any commercially available 2K clear coat or a two part epoxy coating. Follow manufacturer's instructions.

**Clean Up –** Uncured **307FR LITE II** can be cleaned up easily with just water. When cleaning cured **307FR LITE II** wipe with a mild solvent followed by a water rinse. **DO NOT** allow water or solvent to pool on the surface.

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